

AMENDMENTS TO THE DRAWINGS

Attached hereto in an Appendix are four (4) sheets of drawings to replace the drawing sheets originally filed in this application. These sheets, which include FIGS. 1-4, replace the original sheets that included FIGS. 1-A1.

REMARKS

1. In response to the Office Action mailed March 15, 2006, Applicants respectfully request reconsideration. Claims 1-10 were last presented in the application. In the outstanding Office Action, claims 1 and 4 were rejected, claims 2, 3 and 5-10 were objected to. By the foregoing Amendments, claims 1-10 have been cancelled, and claims 11-47 have been added. Thus, upon entry of this paper, claims 11-47 will be pending in this application. Of these 37 claims, four (4) claims (claims 11, 26, 41 and 45) are independent. Based on the above Amendments and following Remarks, Applicants respectfully request that all outstanding objections and rejections be reconsidered, and that they be withdrawn.

Art of Record

2. Applicants acknowledge receipt of form PTO-892 listing additional references identified by the Examiner.

3. Applicants thank the Examiner for returning forms PTO/SB/08a filed by Applicants on March 14, 2002, and June 7, 2002, which have been initialed by the Examiner indicating that the Examiner has considered the references cited therein.

Foreign Priority

4. Applicants note with appreciation Examiner's acknowledgement of Applicants' claim for foreign priority under 35 U.S.C. §119, and further indication that all certified copies of the priority documents have been received.

Preliminary Amendment

5. Applicants thank the Examiner for indicating that the Preliminary Amendment filed by the Applicants on March 14, 2002 has been considered by the Examiner.

Oath/Declaration

6. Applicants thank the Examiner for indicating that the replacement declaration submitted by Applicants on July 15, 2002 is acceptable to the Examiner.

Allowable Subject Matter

7. Applicants thank the Examiner for indicating that claims 2, 3, and 5-10 would be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims and rewritten to overcome any objections or rejections under 35 U.S.C. 112, second paragraph.

Claim Amendments

8. By the foregoing Amendments, Applicants have cancelled claims 1-10. Applicants have added new claims 11-47 to claim embodiments of the present invention. Applicants submit that no new matter has been added.

Amendments to the Specification

9. The Examiner has objected to the specification under 37 C.F.R. 1.74 because FIG. A1 is not described with the brief description of the drawings. Applicants have renumbered "FIG. A1" as "FIG. 4" and have amended the specification accordingly. Specifically, Applicants have added a brief description of "FIG. 4" to the brief description of the drawings and have replaced all occurrences of "FIG. A1" with "FIG. 4." Therefore, Applicants respectfully request that the objections to the specification be reconsidered and that they be withdrawn.

Amendments to the Drawings

10. The Examiner has objected to the drawings under 37 CFR 1.84(u) because the figure number "A1" should be Arabic only. Applicants have renumbered "FIG. A1" as "FIG. 4." Applicants accordingly submit replacement figures in accordance with 37 C.F.R. 1.121(d). Therefore, Applicants respectfully request that the objections to the drawings be reconsidered and that they be withdrawn.

Claim Objections

11. The Examiner has objected to claim 1-10 under 37 CFR 1.75(a) for various reasons. Applicants have cancelled claims 1-10 rendering these objections moot.

12. The Examiner has indicated that the form of the claims has been objected to as not following Office practice because the claims lack an appropriate introduction. Applicants

have added “WHAT IS CLAIMED IS:” prior to claim 11. Therefore, Applicants respectfully request that this objection be reconsidered and that they be withdrawn

Claim Rejections

13. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,583,969 to Yoshizumi *et al.*, (hereinafter, “Yoshizumi”). Applicants have cancelled claim 1, thereby rendering this rejection moot.

14. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizumi in view of Glenn D. White, “The Audio Dictionary,” University of Washington Press, Seattle, WA (1987), pp. 202-203, (hereinafter, “White”). Applicants have cancelled claim 4, thereby rendering this rejection moot.

New Claims

15. Applicants have added new claims 11-47 and respectfully submit that the art of record, taken alone or in combination, fails to anticipate or render obvious these new claims. Specifically, with respect to Applicants’ claim 11, Applicants assert that Yoshizumi fails to teach all elements.

16. First, Yoshizumi fails to teach “a transient emphasis algorithm subsystem configured to detect a short-duration amplitude transition *for each of* said amplitude envelopes; said transient emphasis algorithm subsystem further configured to emphasize said short amplitude transitions *for each of* said amplitude envelopes,” as recited in Applicants’ claim 11. (emphasis added). Rather, Yoshizumi is directed to a system that divides a signal into two frequency channels, and uses these two channels collectively. (See, Yoshizumi, col. 2, lns. 7-53.) According to the embodiments of Yoshizumi, “plosives can be identified by separately filtering higher-frequency components of an input speech signal and lower frequency components thereof, and calculating the ratio of the short-period average amplitude of the higher-frequency components to that of the lower frequency components.” (See, Yoshizumi, col. 3, lns 30-37.) In Yoshizumi, the system derives an average amplitude for each of two channels created by two band pass circuits. (See, Yoshizumi, col. 3, 24-53.) The system of Yoshizumi then divides these averaged amplitudes to determine a ratio of the two amplitudes. (See, Yoshizumi, col. 3, 24-53.) Various comparing and judgment circuits then use this ratio to determine if or how constants or plosives in the original sound signal

should be amplified. (*See*, Yoshizumi, col. 3, 24-53.) As such, the system of Yoshizumi is completely incapable of operating on a single channel without assistance of information derived from other frequency channels. (*See*, Yoshizumi, col. 2, lns. 7-53.) Therefore, because Yoshizumi fails to teach “a transient emphasis algorithm subsystem configured to detect a short-duration amplitude transition *for each of* said amplitude envelopes; said transient emphasis algorithm subsystem further configured to emphasize said short amplitude transitions *for each of* said amplitude envelopes,” Applicants submit Yoshizumi fails to teach all elements of Applicants claim 11. (emphasis added).

17. Second, Applicants assert that Yoshizumi fails to teach a system wherein “further configured to emphasize said short amplitude transitions for each of said amplitude envelopes based on *relative differences in amplitude of each said amplitude envelop*” as recited in Applicants’ claim 11. (emphasis added). Rather, in Yoshizumi the system determines amplification based on the *absolute value* of differences in amplitude. (*See*, Yoshizumi, col. 3, lns 2-18.) (emphasis added). In Yoshizumi, “an absolute value circuit for generating an absolute value of the differentiated ratio [ratio as described above]... a comparing circuit for comparing the absolute value with the threshold value, and for generating a signal indicating whether the absolute value exceeds the threshold value” is used to determine if and how much amplification will be used. (*See*, Yoshizumi, col. 3, lns 2-18.) Therefore, because Yoshizumi bases amplification on *absolute differences* in amplitude, rather than “*relative differences* in amplitude of each said amplitude envelop,” Applicants assert that Yoshizumi does not teach all elements of Applicants’ claim 11. (emphasis added).

18. Third, as explained above, Yoshizumi bases amplification on absolute differences in amplitude between different channels, rather than on “relative differences in amplitude *of each* said amplitude envelop” as recited in Applicants’ claim 11. (emphasis added). For at least this additional reason, Applicants assert that Yoshizumi fails to teach all elements of Applicants’ claim 11.

19. Applicants also assert that neither White nor the other art of record teach or suggest that which is missing from Yoshizumi.

20. Applicants further submit that for the same reasons as discussed above with reference to claim 11, independent claims 26, 41 and 45 are also patentable over the art of record.

Dependent Claims

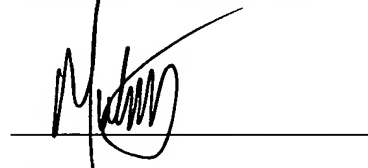
21. The dependent claims incorporate all of the subject matter of their respective independent claims and add additional subject matter, which makes them a fortiori and independently patentable over the art of record. Accordingly, Applicant respectfully requests that the outstanding rejections of the dependent claims be reconsidered and withdrawn.

Conclusion

22. In view of the foregoing, this application should be in condition for allowance. A notice to his effect is respectfully requested.

23. Applicants reserve the right to pursue any cancelled claims or other subject matter disclosed in this application in a continuation or divisional application, cancellations and amendments of above claims, therefore, are not to be construed as an admission regarding the patentability of any claims and Applicant reserves the right to pursue such claims in a continuation or divisional application.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Michael G. Verga', is written over a horizontal line.

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APPENDIX